



What evidence-based resources support teachers' use of American Sign Language (ASL) instruction across the curriculum?



Selected Evidence-Based Resources

- While a number of promising strategies have been suggested to support students who are deaf and hard of hearing (D/HH) across all content areas, many lack well-substantiated evidence. One randomized controlled trial study suggests using multi-sensory techniques, or techniques that integrate visual and tactile teaching strategies. For example, picture dictionaries have been shown to improve communication between D/HH and non-D/HH individuals.¹
- Self-directed learning resources like <u>games</u> and <u>metacognitive strategies</u> may increase D/HH students' ability to independently monitor their own learning and support academic development.
- Researchers have outlined six principles and case studies to support inclusion of D/HH students in regular instruction based on common questions raised during professional development workshops. Similar to <u>Universal Design for Learning (UDL)</u> principles, recommendations include allowing opportunities for multiple expressions of content, optimizing the learning environment through aspects like seating and noise reduction, and individualizing writing structure and support as needed.
- When considering assessment accommodations for D/HH students, the <u>Guidelines for Accessible Assessment Project (GAAP) conducted randomized controlled trials</u> to determine effective K-12 assessment guidelines to represent math test content in ASL. The GAAP team recommends a team-based approach to translation that follows ASL's linguistic rules and conventions. For example, the guidelines strongly recommend limiting fingerspelling to terms that students may be unfamiliar with. Videos of the guidelines can be found <u>here</u>. The Smarter Balanced Consortium (2016) presents considerations for non-embedded signing test accommodations using research from the GAAP project.



Additional Resources



The National Deaf Center on Postsecondary Outcomes includes a <u>resources page</u> with guides, videos, and other information for secondary school leaders and staff to navigate topics like assistive technology. The center is a technical assistance center funded by the U.S. Department of Education's Office of Special Education Programs and Rehabilitation Services Administration.



The National Association of State Directors of Special Education's 2018 report, *Optimizing Outcomes for Students Who are Deaf or Hard of Hearing*, begins with ten essential principles for effective education for D/HH students, including the importance of partnering with families, careful monitoring of student progress, and access to peers/adults who are D/HH. It goes on to provide research-based evidence and recommendations for accommodations.



The <u>Outreach Center for Deafness and Blindness recently produced a tool</u> for families and professionals detailing 33 standards tied to specific outcomes for students who are D/HH, best practice guidance, and case examples to support instruction, advocacy, accommodation, and other educational services.



The <u>National Center on Deaf-Blindness</u> provides resources for education practices in areas like foundations of learning, assessment, and communication and concept development.

¹This study was reviewed by the What Works Clearinghouse but did not meet standards. Read the review here.

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